

REMARKS

In the final Office Action mailed December 4, 2003, the Examiner objected to the disclosure under 35 U.S.C. § 132 as containing new matter; rejected claims 35, 46, 59, 67-68, 76-78, 87, 89, 96, 100, 102, 108, 110, and 132 under 35 U.S.C. § 112, first paragraph, as containing new matter; rejected claims 1-3, 14-16, 18-23, 27-28, 33-45, 54-56, 59-64, 70-76, 78, 80, 89-91, 93-94, 97-106, 120-121, 124-125, and 127-132 under 35 U.S.C. § 102(a) as being anticipated by Goto et al. ("LIGAND: chemical database for enzyme reactions," Bioinformatics, Volume 14, 1998, pages 591-599); and rejected claims 1, 10, 46-53, 57, 59, 67-68, 79, 81-86, 92, 108-109, 122-123, and 133-138 under 35 U.S.C. § 102(a) as being anticipated by Ogata et al. ("KEGG: Kyoto Encyclopedia of Genes and Genomes," Nucleic Acids Research, Volume 27, 1999, pages 29-34). The Examiner also objected to claims 17, 95, and 107, as dependent upon rejected base claims, but allowable if rewritten in independent form.

In view of the foregoing amendments and the remarks that follow, Applicants respectfully traverse the Examiner's objections to the disclosure and rejections of the claims under 35 U.S.C. §§ 102 and 112.

With entry of this amendment, claims 1-56, 58-105, 107-108, 110-129, and 132-142 are pending in the application. Of those claims, claims 4-9, 11-13, 24-26, 29-32, 58, 65-66, 69, and 111-119 have been withdrawn from consideration.

The Examiner indicated that the withdrawal of claims 44 and 45 has been removed (Office Action, paragraph 2).

The Examiner indicated that claim 17 would be allowable if rewritten in independent form. New claim 142 corresponds to claim 17 rewritten in independent

form. Accordingly, because new claim 142 corresponds to a claim indicated as allowable if rewritten in independent form, claim 142 is allowable.

Applicants note that the Examiner omitted any reference to claims 88 and 126. Accordingly, these claims are currently not objected to or rejected. Applicants respectfully request that the Examiner indicate that these claims are allowable.

Applicants wish to thank the Examiner for the courtesy extended to Applicants and Applicants' representative during the personal interview conducted on February 3, 2004. During the interview, claim 1 was the focal point of discussion, and Applicants argued that the cited references do not teach the invention of claim 1, particularly the third database. The Examiner maintained his position that the references teach the features of the third database. Applicants and the Examiner also discussed possible features that may help distinguish the claims from the references. No agreement was reached with respect to the claims.

I. **Finality of the Office Action of December 4, 2003**

Applicants respectfully submit that the finality of the Office Action of December 4, 2003, was improper. Specifically, the Examiner has only rejected claims 44 and 45 on the merits one time. The Examiner alleged that this rejection was necessitated by Applicants' amendments (Office Action, paragraph 26). In the Office Action of March 10, 2003, the Examiner indicated that claims 44 and 45 were withdrawn from consideration. Applicants traversed that withdrawal without amending claims 44 and 45 in the Amendment of September 10, 2003. Because no amendment was made to claims 44 and 45, and because these claims were previously withdrawn due to the

Examiner's error, it was not proper to finally reject claims 44 and 45. Accordingly, the finality of the Office Action of December 4, 2003, should be removed.

II. Objections to the Disclosure Under 35 U.S.C. § 132

The Examiner objects to the disclosure under 35 U.S.C. § 132 (Office Action, paragraph 7). Specifically, the Examiner alleged that Applicants' incorporation by reference was improper because the subject matter being incorporated is essential material that is being used to describe the invention (Office Action, paragraph 10). In making this allegation, the Examiner referenced M.P.E.P. § 608.01(p)(l). *Id.*

Applicants respectfully submit that the Examiner has incorrectly applied M.P.E.P. § 608.01(p)(l). The section quoted by the Examiner merely indicates that an Applicant cannot continue to rely on what has been considered "essential material" by means of incorporation by reference. Instead, Applicants must amend their specification to expressly recite the material: "If the referenced application has not been published or issued as a patent, applicant will be required to amend the disclosure of the referencing application to include the material incorporated by reference." M.P.E.P. § 608.01(p). That is exactly what Applicants have done here. They have amended their application to expressly recite information that was incorporated by reference in their application as filed. This is expressly provided for by the M.P.E.P. and does not constitute the addition of new matter to the specification.

Applicants reiterate that the subject matter added to the disclosure in the Amendment of September 10, 2003 does not represent the introduction of new matter to the application, since the application as filed incorporates the subject matter by reference. The subject matter may be found, among other places, in Provisional

Application No. 60/130,992, filed April 26, 1999, upon which the Applicants claim priority for this application. Subject matter from the Provisional Application includes the additional sheets of drawings attached to the Amendment of September 10, 2003. Other sources for added material are noted in the specification. Applicants note the provisions of M.P.E.P. § 608.01(p)(I)(A), and provide a copy of the Declaration of Applicants' Representative that accompanied the Amendment of September 10, 2003. Accordingly, Applicants request that the Examiner withdraw the objection.

III. Rejections Under 35 U.S.C. § 112, First Paragraph

The Examiner rejects claims 35, 46, 59, 67-68, 76-78, 87, 89, 96, 100, 102, 108, 110, and 132 under 35 U.S.C. § 112, first paragraph, as containing new matter (Office Action, paragraph 14).

Regarding claims 67-68, 76-78, 87, 89, 96, 102, and 108, the Examiner indicated that these claims were rejected because the subject added to these claims is essential material (Office Action, paragraph 16). For the reasons set forth above, Applicants request that the Examiner withdraw the rejection because the disputed language of the claims does not constitute new matter.

Regarding claim 100, Applicants are confused as to why this claim was included in the rejection. The Examiner indicated that the rejection on claim 100 is maintained "as recited in the previous office action mailed March 10, 2003" (Office Action, paragraph 16). The Office Action of March 10, 2003, however, does not include a rejection of claim 100 under 35 U.S.C. § 112, first paragraph. Applicants respectfully request clarification.

Regarding claims 35, 46, 59, and 132, Applicants have removed the term "synthetic" from these claims. Applicants respectfully submit that the new matter rejection of claims 35, 46, 59, and 132 has been overcome.

Regarding claim 110, the Examiner alleged that the limitations of "non-steroidal," "steroidal," and "testosterone" are not in the specification. Applicants respectfully submit that the subject matter may be found for this claim in Provisional Application No. 60/130,992, filed April 26, 1999, upon which the Applicants claim priority for this application. Subject matter from the Provisional Application includes the additional sheets of drawings attached to the Amendment of September 10, 2003. For the reasons set forth above in Section II, the Examiner should withdraw the rejection based on this claim language, which is not new matter.

For these reasons, Applicants request that the Examiner withdraw these rejections.

Applicants also note that claims 77, 87, 96, and 110, are only rejected under 35 U.S.C. § 112, first paragraph. Because the rejections to these claims under 35 U.S.C. § 112, first paragraph, have been overcome for the reasons specified above, Applicants submit these claims are allowable.

IV. Rejections Under 35 U.S.C. § 102

A. Goto et al.

The Examiner rejects claims 1-3, 14-16, 18-23, 27-28, 33-45, 54-56, 59-64, 70-76, 78, 80, 89-91, 93-94, 97-106, 120-121, 124-125, and 127-132 under 35 U.S.C. § 102(a) as being anticipated by Goto et al. (Office Action, paragraph 23). Applicants traverse. In order to properly anticipate Applicants' claimed invention under 35 U.S.C.

§ 102, each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in...the claim.” See M.P.E.P. § 2131 (8th Ed., Aug. 2001), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989). Finally, “[t]he elements must be arranged as required by the claim.” M.P.E.P. § 2131 (8th ed., 2001), p. 2100-69.

Present claim 1 provides for a computer system comprising: a first database containing records corresponding to a plurality of chemical compounds and records corresponding to biological information related to effects of such chemical compounds on biological systems; a second database containing records corresponding to a plurality of molecular targets; a third database containing records corresponding to screening results from tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database, the tests including information on the effect that a compound selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and said selected molecular target; and a user interface allowing a user to view the selected compound and to selectively view information from the first database, the second database, and the third database as it relates to a compound record in the first database or as it relates to a molecular target in the second database.

Applicants respectfully submit that Goto et al. does not disclose (or suggest) this claimed combination of elements. For example, the reference does not disclose or

suggest at least a third database containing records corresponding to screening results from tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database, the tests including information on the effect that a compound selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and said selected molecular target.

Goto et al. discloses the LIGAND chemical database, which includes two sections: ENZYME and COMPOUND (page 591, left col.). The COMPOUND section has information on the nomenclature and chemical structures of compounds (page 591, left col.). The ENZYME section of the LIGAND database accumulates information on known enzymes and reactions (page 592, right col.). Reaction data is reflected in the REACTION field of the ENZYME entry (page 592, right col.). Enzymatic or non-enzymatic reactions may be written in the form of a chemical reaction in the REACTION field and maintained in a relational database as a substrate-product binary relationship, or a set of substrate-product binary relationships (page 594, left col.). Goto et al. also discloses a database called BRITE that is for molecular interactions in general (page 597, right col.). LIGAND is a component of the KEGG and DBGET/LinkDB systems.

In contrast, systems and methods consistent with the present invention as recited, for example, in present claim 1 provide for a database containing records corresponding to screening results from tests of interactions between each of a plurality of compounds in a first database and each of a plurality of molecular targets in a second database. The tests include information on the effect that a compound selected from the first database has on the interaction between a reference compound known to

interact with a selected molecular target from the second database and the selected molecular target.

The databases disclosed in Goto et al. do not store screening results from tests of interactions between each of a plurality of compounds in a first database and each of a plurality of molecular targets in a second database. Goto et al. does show some interaction information. For example, as noted above, the BRITE database stores information on molecular interactions in general (page 597, right col.). This information on molecular interactions, however, does not teach (or suggest) the concept of storing screening results from tests of interaction between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database.

The tests of the present invention as shown in claim 1, for example, may be used to see how a compound interacts with each of many molecular targets in a database (e.g., a one to many relationship). The tests may also be used to see how a molecular target interacts with each of many compounds in a database. The screening results from the tests may be stored in a database. While information on molecular interactions may be found in the BRITE database, there is no teaching (or suggestion) that this database stores information reflecting a one to many relationship. Nor is there any other database disclosed by Goto et al. that suggests storing such information. Such screening results are simply not stored by the databases of Goto et al.

Additionally, the databases disclosed in Goto et al. do not store information that reflects the effect that a compound selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and the selected molecular target. Goto et al. shows

interaction information in general but not information on the effect that a selected compound has on an interaction between a reference compound and a selected molecular target.

Accordingly, Goto et al. does not teach or suggest “a third database containing records corresponding to screening results from tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database, the tests including information on the effect that a compound selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and said selected molecular target.”

For at least the foregoing reasons, Applicants submit that claim 1 is not anticipated by Goto et al. Because independent claims 33 and 37 recite language similar to that which distinguishes claim 1 from Goto et al., Applicants further submit that claims 33 and 37 are not anticipated by Goto et al. for at least the reasons given with respect to claim 1.

Present claim 35 provides for a computer system comprising: a first database containing data corresponding to a plurality of chemical compounds and data corresponding to biological information related to effects of such chemical compounds on biological systems; a second database containing data corresponding to a plurality of molecular targets; a third database containing data corresponding to tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database; and a user interface allowing a user to view data from the first database, the second database, and the third database

as it relates to at least one compound in the first database or as it relates to at least one molecular target in the second database or as it relates to one or more interactions in the third database.

Applicants respectfully submit that Goto et al. does not disclose or suggest at least this claimed combination of elements. For example, the reference does not disclose or suggest at least a third database containing data corresponding to tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database.

The databases disclosed in Goto et al. do not store data corresponding to tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database. Goto et al. does show some interaction information. For example, as noted above, the BRITE database stores information on molecular interactions in general (page 597, right col.). This information on molecular interactions, however, does not teach the concept of storing data corresponding to tests of interaction between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database.

The tests of the present invention as shown in claim 35, for example, may be used to see how a compound interacts with each of many molecular targets in a database (e.g., a one to many relationship). The tests may also be used to see how a molecular target interacts with each of many compounds in a database. Data corresponding to the tests may be stored in a database. While information on molecular interactions may be found in the BRITE database, there is no suggestion that this

database stores information reflecting a one to many relationship. Nor is there any other database disclosed by Goto et al. that suggests storing such information.

Accordingly, Goto et al. does not teach or suggest “a third database containing data corresponding to tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database.”

For at least the foregoing reasons, Applicants submit that claim 35 is not anticipated by Goto et al. Because independent claim 59 recites language similar to that which distinguishes claim 35 from Goto et al., Applicants submit that claim 59 is not anticipated by Goto et al. for at least the reasons given with respect to claim 35.

Present claim 44 provides for a memory for storing data for access by a process being executed by a processor, the memory comprising: a data structure for maintaining (i) a first set of information associated with one or more chemical compounds, (ii) a second set of information associated with one or more molecular targets, and (iii) a third set of information reflecting interactions between each of a plurality of the chemical compounds and each of a plurality of the molecular targets, wherein the process may provide, based on one or more queries, new information reflecting a relationship between a chemical compound included in the first set, a molecular target included in the second set, and the information included in the third set.

Applicants respectfully submit that Goto et al. does not disclose or suggest at least this claimed combination of elements. For example, the reference does not disclose or suggest at least a third set of information reflecting interactions between each of a plurality of the chemical compounds and each of a plurality of the molecular targets, wherein the process may provide, based on one or more queries, new

information reflecting a relationship between a chemical compound included in the first set, a molecular target included in the second set, and the information included in the third set.

The databases disclosed in Goto et al. do not store data corresponding to tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database. Goto et al. does show some interaction information. For example, as noted above, the BRITE database stores information on molecular interactions in general (page 597, right col.). This information on molecular interactions, however, does not teach the concept of storing data corresponding to tests of interaction between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database.

The tests of the present invention as shown in claim 44, for example, may be used to see how a compound interacts with each of many molecular targets in a database (e.g., a one to many relationship). The tests may also be used to see how a molecular target interacts with each of many compounds in a database. Data corresponding to the tests may be stored in a database. While information on molecular interactions may be found in the BRITE database, there is no suggestion that this database stores information reflecting a one to many relationship. Nor is there any other database disclosed by Goto et al. that teaches (or suggests) storing such information.

In addition, Goto et al. does not teach that a process may provide, based on one or more queries, new information reflecting a relationship between a chemical compound included in the first set, a molecular target included in the second set, and

the information included in the third set. In other words, the process may analyze the various data sets and produce new information on the relationship between the different data sets. Nothing in Goto et al. provides a similar function.

Accordingly, Goto et al. does not teach or suggest “a third set of information reflecting interactions between each of a plurality of the chemical compounds and each of a plurality of the molecular targets, wherein the process may provide, based on one or more queries, new information reflecting a relationship between a chemical compound included in the first set, a molecular target included in the second set, and the information included in the third set.”

For at least the foregoing reasons, Applicants submit that claim 44 is not anticipated by Goto et al.

Present claim 45 provides for the following: in a system for correlating data associated with chemical compounds and molecular targets, a memory comprising: a first array of records, each including information indicative of a chemical compound; a second array of records, each including information indicative of a molecular target; a third array of records, each corresponding to a binding capability between each of the chemical compounds and molecular targets; and a fourth array of records, each corresponding to a biological activity related to the chemical compounds and the molecular targets, wherein a process may access the first, second, and third arrays to produce information corresponding to a drug potential for a new compound based on relationships between characteristics associated with the new compound and a selected biological activity included in the fourth array of records or patterns of binding capabilities included in the third array.

Applicants respectfully submit that Goto et al. does not disclose or suggest at least this claimed combination of elements. For example, the reference does not disclose or suggest at least a third array of records, each corresponding to a binding capability between each of the chemical compounds and molecular targets. The reference also does not disclose or suggest that a process may access the first, second, and third arrays to produce information corresponding to a drug potential for a new compound based on relationships between characteristics associated with the new compound and a selected biological activity included in the fourth array of records or patterns of binding capabilities included in the third array.

The databases disclosed in Goto et al. do not include an array of records, each corresponding to a binding capability between each of the chemical compounds and molecular targets. Assuming, arguendo, that a database in Goto et al. can be considered to store data related to binding capability related to some chemical compounds and molecular targets, the data does reflect a binding capability between each of the chemical compounds and molecular targets. Accordingly, Goto et al. does not teach or suggest “a third array of records, each corresponding to a binding capability between each of the chemical compounds and molecular targets.”

Moreover, Goto et al. does not teach that a process may access the first, second, and third arrays to produce information corresponding to a drug potential for a new compound based on relationships between characteristics associated with the new compound and a selected biological activity included in the fourth array of records or patterns of binding capabilities included in the third array. Nothing in Goto et al. provides a similar function. Accordingly, Goto et al. does not teach or suggest that “a

process may access the first, second, and third arrays to produce information corresponding to a drug potential for a new compound based on relationships between characteristics associated with the new compound and a selected biological activity included in the fourth array of records or patterns of binding capabilities included in the third array.”

For at least the foregoing reasons, Applicants submit that claim 45 is not anticipated by Goto et al.

Present claim 54 provides for the following: in a system for maintaining test screening results, a storage device for storing data for access by a process being executed by a processor comprising: a data set including information corresponding to results of screening assay tests that measure an interaction between all possible combinations of chemical compounds in a compound set and molecular targets in a molecular target set, thereby creating a full-rank data set of test results, wherein the process provides selected result information based on a request associated with a selected chemical compound or molecular target. Nor is there any other database disclosed by Goto et al. that suggests storing such information.

Applicants respectfully submit that Goto et al. does not disclose or suggest at least this claimed combination of elements. For example, the reference does not disclose or suggest at least a data set including information corresponding to results of screening assay tests that measure an interaction between all possible combinations of chemical compounds in a compound set and molecular targets in a molecular target set, thereby creating a full-rank data set of test results.

The databases disclosed in Goto et al. do not store information corresponding to results of screening assay tests that measure an interaction between *all possible combinations* of chemical compounds in a compound set and molecular targets in a molecular target set. Goto et al. does show some interaction information. For example, as noted above, the BRITE database stores information on molecular interactions in general (page 597, right col.). This information on molecular interactions, however, does not teach the concept of storing information corresponding to results of screening assay tests that measure an interaction between *all possible combinations* of chemical compounds in a compound set and molecular targets in a molecular target set.

Accordingly, Goto et al. does not teach or suggest “a data set including information corresponding to results of screening assay tests that measure an interaction between all possible combinations of chemical compounds in a compound set and molecular targets in a molecular target set, thereby creating a full-rank data set of test results.”

For at least the foregoing reasons, Applicants submit that claim 54 is not anticipated by Goto et al. Because independent claim 132 recites language similar to that which distinguishes claim 54 from Goto et al., Applicants further submit that claim 132 is not anticipated by Goto et al. for at least the reasons given with respect to claim 54.

Dependent claims 2-3, 14-23, 27-28, 34, 36, 38-43, 55-56, 60-64, 70-76, 78, 80, 89-91, 93-94, 97-102, 103-106, 120-121, 124-125, and 127-131 are allowable not only for the reasons stated above with regard to their respective allowable base claims, but also for their own additional features that distinguish them from Goto et al.

In view of these remarks, Applicants request that the Examiner withdraw the rejection.

B. Ogata et al.

The Examiner rejects claims 1, 10, 46-53, 57, 59, 67-68, 79, 81-86, 92, 108-109, 122-123, and 133-138 under 35 U.S.C. § 102(a) as being anticipated by Ogata et al. (Office Action, paragraph 40). Applicants traverse the rejection.

Applicants respectfully submit that Ogata et al. does not disclose or suggest at least the claimed combination of elements of claim 1. For example, as in the case of Goto et al., the reference does not teach or suggest “a third database containing records corresponding to screening results from tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database, the tests including information on the effect that a compound selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and said selected molecular target.”

Ogata et al. discloses that KEGG maintains a catalog of chemical elements, compounds, and other substances in living cells as the LIGAND database (page 29, right col.). Ogata et al. discloses that the LIGAND database stores information of chemical compounds, enzyme molecules, and enzymatic and non-enzymatic reactions (page 33, right col.).

As noted above with reference to Goto et al., systems and methods consistent with the present invention as recited in present claim 1 provide for a database containing records corresponding to screening results from tests of interactions between

each of a plurality of compounds in a first database and each of a plurality of molecular targets in a second database. The tests include information on the effect that a compound selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and the selected molecular target.

The databases disclosed in Ogata et al. do not store screening results from tests of interactions between each of a plurality of compounds in a first database and each of a plurality of molecular targets in a second database. Ogata et al. discloses the LIGAND database, which includes some interaction information, but does not teach the concept of storing screening results from tests of interaction between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database.

Additionally, the databases disclosed in Ogata et al. do not store information that reflects the effect that a compound selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and the selected molecular target. Ogata et al. shows interaction information in general but not information on the effect that a selected compound has on an interaction between a reference compound and a selected molecular target.

Accordingly, Ogata et al. does not teach or suggest “a third database containing records corresponding to screening results from tests of interactions between each of a plurality of compounds in the first database and each of a plurality of molecular targets in the second database, the tests including information on the effect that a compound

selected from the first database has on the interaction between a reference compound known to interact with a selected molecular target from the second database and said selected molecular target.”

For at least the foregoing reasons, Applicants submit that claim 1 is not anticipated by Ogata et al. Because independent claim 133 recites language similar to that which distinguishes claim 1 over Ogata et al., Applicants further submit that claim 133 is not anticipated by Ogata et al. for at least the reasons given with respect to claim 1.

Present claim 46 provides for a database for storing data for access by a process executed by a processor, the database comprising: a compound data structure including data associated with a set of chemical compounds; a target data structure including data associated with a set of molecular targets; and a result data structure including data corresponding to results of screening tests between each of a plurality of chemical compounds from the set of chemical compounds and each of a plurality of molecular targets from the set of molecular targets, wherein the process determines a new relationship between the data included in the compound, target, and result data structures.

Applicants respectfully submit that Ogata et al. does not disclose or suggest this claimed combination of elements. For example, the reference does not disclose or suggest at least a result data structure including data corresponding to results of screening tests between each of a plurality of chemical compounds from the set of chemical compounds and each of a plurality of molecular targets from the set of

molecular targets, wherein the process determines a new relationship between the data included in the compound, target, and result data structures.

As noted above, Ogata et al. discloses that KEGG maintains a catalog of chemical elements, compounds, and other substances in living cells as the LIGAND database (page 29, right col.). Ogata et al. discloses that the LIGAND database stores information of chemical compounds, enzyme molecules, and enzymatic and non-enzymatic reactions (page 33, right col.). These databases and other databases disclosed in Ogata et al. do not store data corresponding to results of screening tests between each of a plurality of chemical compounds from the set of chemical compounds and each of a plurality of molecular targets from the set of molecular targets.

In addition, Ogata et al. does not teach that a process determines a new relationship between the data included in the compound, target, and result data structures. In other words, the process may analyze the various data structures and produce new information on the relationship between the different data in the data structures. Nothing in Ogata et al. provides a similar function.

For at least the foregoing reasons, Applicants submit that claim 46 is not anticipated by Ogata et al. Because independent claim 59 recites language similar to that which distinguishes claim 46 from Ogata et al., Applicants further submit that claim 59 is not anticipated by Ogata et al. for at least the reasons given with respect to claim 46.

Dependent claims 10, 47-53, 67-68, 79, 81-86, 92, 108-109, 122-123, and 134-138 are allowable not only for the reasons stated above with regard to their respective

allowable base claims, but also for their own additional features that distinguish them from Ogata et al.

Based on the above remarks, Applicants request that the Examiner withdraw this rejection.

CONCLUSION

Since each of the claims is allowable, Applicants respectfully request the timely allowance of this application.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing the claims in condition for allowance. Applicants submit that the proposed amendments of the claims do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

Finally, Applicants submit that the entry of the amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

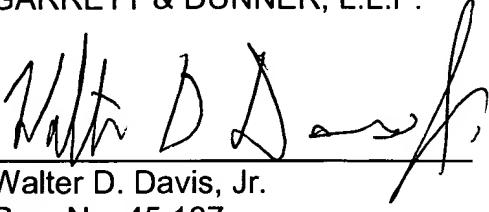
If an extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Amendment, such extension is requested. If there are any other fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: April 5, 2004

By:


Walter D. Davis, Jr.
Reg. No. 45,137